

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: MAY 30 1980

SUBJECT: Response to Comments on the Increment II PSD Preliminary Permit

FROM: Paul A. Boys *Paul*
Senior Chemical EngineerTO: Mike Johnston, Chief
New Source Permits SectionTHRU: Bill Schmidt, Chief *Paul Boys for*
Air Surveillance & Investigation Section

I have reviewed the comments submitted by ARCO and SOHIO pertaining to the Increment II PSD permit. Basically, I think we can accomodate their primary concerns without diluting the intent of the specific permit conditions. Listed below are my responses to their comments and recommendations for changes in the permit conditions. As you probably noted, they did not comment on the NO_x emission limitation for the process heaters. Pat Metz of ARCO told me he now agrees they can meet that NO_x limitation.

1. Compliance testing--There are two points of concern: (a) testing of only one of each kind of heater or turbine, and (b) factory testing vs. on-site testing. After discussing this with the NSPS group at OAQPS, I think we must require testing of each turbine. Factory testing is an acceptable alternative if tested under the same conditions as will be encountered on-site. The process heaters should be tested on-site, but only one of each kind needs to be tested. The company should submit a test plan to EPA for approval. The suggested wording for the compliance determination portion of the permit is attached.
2. The 5% opacity limits--They admit that visible emissions will probably be low. In fact, all the data we have (including G.E. turbines and NSPS tests) indicate that both gas-fired turbines and process heaters will be less than 5% opacity. Through my phone conversations with Pat Metz, I gathered that they are primarily concerned with the opacity limit for turbines. Since the intent of the opacity limitation is to insure good operation and maintenance, we can change the turbine opacity limit to 10% and accomplish the same objective while building in a "safety margin" for the company. However, I do not see any reason to change the opacity limitation for the gas-fired heaters.
3. Continuous CO or O₂ monitoring--Their primary concern is to have the option of periodic testing with a portable instrument. I believe we can accomplish the objective of

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insuring good operation and maintenance through either technique. However, they should submit a monitoring plan for approval if they choose to use periodic monitoring. Proposed wording for the permit condition is attached.

Attachment

Compliance Determination

Compliance with the emission limitations shall be demonstrated by the company conducting source tests and a program of emissions monitoring as described below.

- (1) Compliance testing shall be conducted within 60 days after achieving the maximum production rate at which the turbines or process heaters will be operated but not later than 180 days after startup of the specific emission source. The NSPS testing requirements for NO_x from gas turbines (40 CFR 60.335) shall be followed for each turbine. EPA Method 7 shall be used for NO_x from the process heaters. Only one of each kind of process heater must be tested. The company shall submit a test plan to EPA for approval to demonstrate that the heater tested is representative of the heaters for which testing is exempted. No compliance testing is required for CO or PM.
- (2) Compliance Monitoring--In addition to the NSPS requirements (40 CFR 60.334) one of the following monitoring schemes is required: (a) a continuous monitoring system shall be installed to monitor CO or O₂ for all gas-fired process heaters. These monitors shall comply with the specification requirements in Appendix B of 40 CFR Part 60; or (b) a periodic monitoring program for the process heaters using a portable CO or O₂ analyzer. The company shall submit a monitoring plan to EPA for approval describing the details of the program such as monitoring frequency, proposed instrumentation, and quality assurance procedures. Monitoring records shall be available to EPA upon request and shall be maintained for a period of two years.